Public Health Risk Communication: lessons learned

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Content

• Definition
• Canadian examples
• Emergency Risk Communications
  *Tools for Effective Strategies*
• Some applications
• Conclusion
Definition

- *Dissemination of appropriate information about risk that enable the public and decisions makers to make appropriate decision*

- *Risk is a dual process of fact and feelings (pain, suffering, unknown, choice, control, trust, nature of threat, etc.)*  
  IAEA
Definition

- Risk communication is a matter of what an organization does, not just what it says.
- Risk communication must account for the affective component in people’s perceptions of risk.
- Risk communication will be more effective if it is thought of as dialogue, not instruction. (encourage certain behavior)
- Risk communication and crisis
Examples in Canada
SARS 2003
SARS 2003 (Tyshenko & al 2010)

- Clear lack of communication between key groups
- Many authoritative voices with different perspective and sometimes conflicting opinion
- No education plan or information campaign to empower the public
- Post SARS focus on isolation rooms but not so much on ways to improve communication to the public
SARS 2003

• Creation of the Public Health Agency of Canada
  - Authoritative voice
  - Link between experts and population
  - Website and IT social media to educate the public
  - Strategic risk communication policy
H1N1 2009
H1N1 2009 (Luth & al. 2013)

Main topics in news coverage

<table>
<thead>
<tr>
<th>TV audio topics (coding categories)</th>
<th>%TV news clips (n=47)</th>
</tr>
</thead>
<tbody>
<tr>
<td>vaccination line-ups</td>
<td>70%</td>
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<tr>
<td>frustration</td>
<td>60%</td>
</tr>
<tr>
<td>official response</td>
<td>50%</td>
</tr>
<tr>
<td>priority groups H1N1</td>
<td>40%</td>
</tr>
<tr>
<td>new cases H1N1</td>
<td>30%</td>
</tr>
<tr>
<td>vaccine shortages</td>
<td>20%</td>
</tr>
<tr>
<td>vaccination clinic</td>
<td>10%</td>
</tr>
<tr>
<td>temp. Clinic closure</td>
<td>10%</td>
</tr>
<tr>
<td>criticism of govt</td>
<td>10%</td>
</tr>
<tr>
<td>queue jumpers</td>
<td>10%</td>
</tr>
<tr>
<td>reopening of clinics</td>
<td>10%</td>
</tr>
<tr>
<td>flu assessment clinic</td>
<td>10%</td>
</tr>
<tr>
<td>adj vs non-adj vaccine</td>
<td>10%</td>
</tr>
<tr>
<td>doctors and pharmacist</td>
<td>10%</td>
</tr>
<tr>
<td>Calgary flames queue jumping</td>
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</tr>
<tr>
<td>flu impacting businesses</td>
<td>10%</td>
</tr>
<tr>
<td>decision to vaccinate</td>
<td>10%</td>
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<tr>
<td>flu information</td>
<td>10%</td>
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<tr>
<td>group specific interest</td>
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</tr>
<tr>
<td>pandemic</td>
<td>10%</td>
</tr>
<tr>
<td>schools</td>
<td>10%</td>
</tr>
<tr>
<td>rename change swine to H1N1</td>
<td>10%</td>
</tr>
</tbody>
</table>
H1N1 2009 (Luth & al. 2013)

Comparison of vaccination priority groups in audio and visual content

Catégories of risk groups from low to high

<table>
<thead>
<tr>
<th>Group</th>
<th>Audio (n=116)</th>
<th>Video (n=131)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seniors</td>
<td>8%</td>
<td>2%</td>
</tr>
<tr>
<td>Adults 19-64</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>Parents of any age children</td>
<td>3%</td>
<td>6%</td>
</tr>
<tr>
<td>People in remote communities</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Caregivers of high risk individuals</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Front line health workers</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Parents of babies &lt; 6 months</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Infants</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>Young children</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Chronically ill children &lt;10</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Chronically ill seniors &gt;65</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Chronically ill</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>
H1N1 2009: discussion (Luth & al. 2013)

• Spokepeople should be clearly identified, well trained, confident and accessible
• White coat effect!
• Awareness of the effect of colours
• Account for the dual format of television news and provide ready-to-use visual content to complement key messages
Cryptococcus gattii 2001
Cryptococcus gatii 2001 (Nicol & al. 2008)

- Fungus typically found in tropical or subtropical region (ex. Australia)
- Transmission: inhalation (organism in soil or trees, no human to human)
- Aug 2001 to June 2006: 157 seriously ill and 5 deaths
- Media starts talking about it in June 2002
Cryptococcus gattii 2001  (Nicol & al. 2008)
Cryptococcus gattii 2001 (Nicol & al. 2008)

- Reasons for low coverage
  - Scientific uncertainty
  - Complexities in naming and describing the organism
  - Lack of risk mitigation options, policies or controversy
  - Local stories competing in a Global media arena (WNV, Iraq War, SARS)
Cryptococcus gattii 2001 (Nicol & al. 2008)

• Implications of low coverage:
  - Media up to date source for learning about new emerging pathogen and not only by the general public (ex: SARS and GPHIN)

  - Media report can improve surveillance and disease detection during an outbreak
Cryptococcus gattii 2001 (Nicol & al. 2008)

Conclusions:
Release risk information as early as possible even if uncertain:
- Help to alert people to a potential problem
- Trust in the health officials
- Improved channels of communication between the public and health officials
Emergency Risk Communications
*Tools for Effective Strategies*
Health Emergencies Decision-Making Tool

Is the info needed to protect health?

Is the info needed to build trust?

Is there a compelling reason to withhold info?
Stakeholder Map

- **Decision-makers**: departments/branches/other jurisdictions that have a primary or shared role in regulating the risk
- **Most-at-Risk**: the stakeholders who are most affected by the risk issue and its management and have some sort of decision or behaviour-change to make in order to minimize their risk
- **Active interests**: individuals or groups who have a stake in the issue, but are not directly involved
- **Audiences**: general media, other government departments, and interested agencies and associations who are not actively engaged in the issue or its management
Stakeholder Prioritization

• Which of the stakeholders are most affected – positively or negatively- by the issue and our risk management decision-making?

• Is it in our jurisdiction to work with these people?

• Who has been involved in this type of issue in the past?

• Who will share in the ultimate decision-making about the issue?

• Who could help you achieve your goal if you reached out to them?

• Who has the potential to hurt our response?

• Who has the greatest influence?

• Who do you absolutely not want to surprise?
Considerations for Risk Messaging

• Literacy
  » Aim 6th grade level

• Common knowledge
  » Can’t assume public’s knowledge base
  » Monitor & adapt

• Omnipresent warnings can undermine any single warning's impact

• Medium can depend on the message
Risk Perception Assessment Tool

Potential Triggers for Increased attention
- Profile in the US or Europe
- Link between issue and holiday or seasonal activities

Evidence of Increased Public Awareness
- Increase in media coverage/calls
- Social media traffic
- NGO/Stakeholder activity

Predictors of Increased Risk Perception
- Affects infants or children
- Source of risk perceived as low-trust
- Risk specific to a group already vulnerable?
Applications

• YULEX 2013
  - Evaluate the message to passengers

• Travel health kiosks pilot project at departure/arrival gates
Conclusion

• Communicate is not just for the sake of informing or educating stakeholders or citizens, but to **ENSURE** that people take the appropriate action to reduce the risk

• Transparency is the key!
References


• Tyshenko MG, Paterson C. SARS Unmasked: Risk communication of pandemics and influenza in Canada. Mc Gill-Queen’s University Press 2010


Questions!